B.A.R.C.'s Bark

Volume XXIII - Issue 5 **May, 1998**

President's Notes

The members who showed up at last months meeting plus the new and prospective hams who attended, were treated to a most interesting and entertaining presentation by Dave Casler, KE0OG, who attempted to answer those questions that every new ham needs to know but is often afraid to ask. Afterwards, the BARC members showed their hospitality and spent a lot of one-on-one time answering specific questions and providing helpful hints to these neophytes. I'm sure we will probably attract a few of them as new members. The enthusiasm they show as they enter this great hobby makes us all remember how we probably were when we first began down our own pathway into amateur radio.

This month we will have a timely and important presentation from one of the most active groups of amateurs who provide a key informational service for the safety of people all over the USA. The Colorado SKYWARN chapter is certainly one of the premier groups within the SKYWARN organization and this presentation should be most informative to hams and non-hams alike. Come on out to this meeting and meet this heroic group of men and women who sometimes risk their own lives and property in order to save others by providing "up close and personal" observations in severe storm and tornado activity.

I'd like to take this opportunity to thank the members of the BARC board of directors and especially our VP, Jim Layman, N0VLE, for not only obtaining a great meeting place for our club but also for

(see "Notes" continued on page 2)

Meeting Minutes

Board Meeting

The BARC Board of Directors met April 6, 1998, with Jack/WM0G, Rip/NV0M, Jim/N0VLE, Dan/N0NLS and Ellie/N0QCX attending, plus guests Al/W0LMQ and Dale/KA0QPV. Dave/KE0OG was out of town.

REPORTS:

Treasurer: out of town.

Repeater trustee: no changes.

Membership: 133 members have renewed for 1998.

Juniors: LARCfest was quite successful for the BARC Jrs.

Field Day: Bruce/WB-0MZI has a work conflict and will not be able to act as Field Day Chair. Jack will announce this at the general meeting and see if there are any volunteers to take over.

BARCfest:

We have received Regional ARRL approval to hold the Rocky Mountain District Convention at BARCfest.

The recent LARCfest was discussed to see what ideas we might use, and what we might want to change for BARCfest in September.

Jack proposed that we offer one free table, admission tickets not included, to a number of local ham groups to provide a more interesting round-up of ham activities. Such would include BCARES, EOSS etc.

OTHER BUSINESS:

Phone line: Randy/K0RCC notes the BARC message telephone line is costing us $26/month, and has the disadvantage that one person has to do all the work of checking for messages and updating the greeting. For $108/year, we can get a stand-alone voice mail box with its own dial-in number. The Board unanimously agreed that we should switch our service immediately. Randy took the action to set it up.

Equipment: BARC's TS-120 radio is surplus; the Board unanimously approved its sale.

BALDF: Al/W0LMQ and Dale/KA0QPV asked to address the board regarding the Boulder Antenna Legal Defense Fund, which was set up in 1987 to counter local anti-antenna tower legislation. Donations were taken from many individuals and clubs, but BARC also gave the fund a no-interest loan of $2000. $800 of that was paid back some time ago. BALDF is now liquidating, and before doing so returned the remaining $1200 loan to BARC.

General Meeting

BARC's monthly general meeting was held

(See "Minutes" cont. on Page 10)

In This Issue:

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BARC Repeater
146.700 (-600 KHz offset)
100 Hz CTCSS

BARC 24 Hour Phone Number
303-380-6540

BARC E-Mail Address
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BARC Website
http://www.thisistrue.com/barc.html

Monthly Meetings are held on the Third Tuesday of every month at NIST @ 7:30 PM (unless notified)

("Notes" continued from page 1)

planning the entire year's monthly meetings with some exceptionally interesting topics and speakers. I have the opportunity to read a lot of radio club newsletters and even attend a few ham radio club meetings around the country and you'd be hard pressed to find a club with a better facility than NIST to hold their monthly meetings and even harder pressed to find another club that has the quality of programs, presentations and speakers that Jim and the board have set for this year. It has resulted in an ever increasing monthly meeting attendance and new memberships. Be sure to look at the BARC calendar on Page 5 of this issue of the BARC's Bark newsletter and circle those programs, activities and events of interest to you and plan to attend.

Our perennial Field Day chairman, Bruce, WB0MZI has had a conflict with his work schedule this year and so far no one else has stepped up to chair Field Day for the BARC Sr.'s. It's not too late and we certainly have enough interest, equipment and money within BARC to host another FD site. The BARC Jr. Field Day preparations are nearing completion and they should have another successful event. If anyone is interested, please let me know - there is plenty of help available to get it organized!

Thanks to all the members from BARC and BARC Jr. who have volunteered for the MS Walkathon on May 9th this year. I'll recap the event in next month's issue.

I've been reading in QST, and around the various packet and Internet sites, a lot about the ARRL's request to the FCC for a declaratory ruling on the previously voluntary amateur radio bandplan. It has brought up a lot of mixed emotions within me in regards to how this is being handled. Typically, there should have been a Notice of Proposed Rule Making, offered to the amateur community permitting us time to comment. I'm sure the

(see"Notes" continued on page 5)

Editor's Corner

Hello BARC's Bark-ers:

I am really excited about this month's newsletter and all the activities scheduled in the next few months, especially the Dayton HamVention, which a few of you are going to be attending and specifically those BARC Jr.'s who have worked so hard to be awarded this most memorable trip. Crystal, KC0AJF and Blair, KB0ROM, we are so proud of you. You are a terrific example to the rest of the Juniors as an incentive to follow in your footsteps. By the way, Blair, KB0ROM, congratulations on winning last month's puzzler.

Great news, everybody! This newsletter continues to receive super articles and ideas from it's members and because of this, we've had to add a couple more pages but the price is still the same so we hope you will enjoy it. I would like to thank Rich Weingarten, N0SH, for his wonderful article this month, on the BARC Jr.'s organization and their Field Day! It is a pleasure to be associated with such a fine group of young men and women; the Elmer's and the grandparents of the group, Ellie, N0QCX and Rip, NV0M.

Recently, it was brought to my attention by Larry Amann, K5TQN, that amateur radio had been established as a National Policy by Congress through the adoption of a Joint Resolution and became Public Law # 103-408. I was unfamiliar with this so I looked it up under the proceedings of the 103rd Congress of the United States of America. Larry and I wondered just how many of the newer hams were familiar with this so I decided to publish it in this month's newsletter in it's entirety. You can find it on page 7.

To all of those going to Dayton, have a safe trip. Will see you all next month.

73 and 88, Mary

To submit items for the BARC's Bark newsletter send them to: Mary Ciaccia at PO Box 21362, Boulder, CO 80308 - 4362 or Fax them to 303-665-8703 or EMail them to: WM0G@aol.com.

Articles need to be to the editor by the end of the month. Please be sure to put your name at the top of the article. -- *ed.*

Yap Yap "The Voice of BARC Jr."

BARC Jr. Officers Jan - Jun 1998

President - Nathan, KB0UQS

Vice President - Tyler, KB0SHT

Secretary - Blair, KB0ROM

Co-Treasurers - Chapman, KB0PON & Walt, KC0BPC

Young Hams Net

Sundays at 7:00 PM
146.700 (-600KHz 0ffset)

BARC Jr. News

On May 9th Boulder County will hold their annual MS Walkathon. This year the following BARC Jr.'s and Elmers will be taking part to provide communications. Dave, KE0OG; Loretta, KB0VWW; Jonathan, KC0BGU; Chapman, KB0PON; Sarah, KB0ZRV; Terry, KC0BCP; Nathan, KB0UQS and Eric, KG0YS. They will be part of a communications team from BARC & BARC Jr. Thanks to all of you for your participation.

Congratulations to Huck on his new callsign, KC0AGV. Also to Rich, on his new call, N0SH and Marc's new call, AB0GX.

A reminder that Field Day is June 27th and 28th this year. The permission slips will be given to you in early June for your parents to sign. Also, due to field day we will remain during the month of June on our regular BARC Jr. meeting dates and the summer schedule will start in July.

Blair and Crystal did a really great job on their presentations at the Castle Rock Repeater Group Luncheon on April 26th (many wonderful comments were heard on the 146.67 repeater afterwards) and on their last presentation before Dayton on May 2nd to the BARC Jrs. Thanks to Crystal and Blair for all of their hard work and efforts. BARC Jr. and BARC is very proud of both of you and the Dayton youth forum will be very fortunate, once again, for BARC Jrs. participation this year.

Submitted by: Ellie, N0QCX

BARC Jr. Field Day -- A Recipe for Success

Elmers -- about a dozen, some ripe, some not so ripe.

Young Hams -- 20 or more of all shapes and sizes.

Large Tent -- 1 large tent with minimal defects.

Antennas -- as many as you dare.

Location -- as much room as can be mustered (mustard?).

Radios -- enough to permit ample operation time for all.

Food -- huge quantities.

Generators -- the smellier, the better.

Facilities -- several porta-potties are a must.

Start about six to eight months prior to the 4th weekend of June. Have some Elmers and kids begin to simmer their ideas together in a large, poorly lit room. Gradually stir in radios, tents, food, antennas, generators, food, a few more Elmers, and more food. Allow to ferment, rise, and mutate. Allow this combination to simmer and stew, whether it is ready or not, until the appointed weekend in June and pour it with gusto onto a field. RF will be spontaneously generated by this combination if the measurements were even close to correct. Once the spontaneous RF generation has ceased, tired hams of all ages will return home to dream of CW comtacts is their waking dreams.

The Boulder Amateur Radio Club's (BARC Jr.) young ham auxiliary struck out on its own in 1996. They were *ready* to strike out on their own. There were several well-seasoned hams in the group. Only a handful had tackled a Field Day alone, no less a Field Day with over 20 young hams. Few, if any, had any idea of what to expect. It was not known if there would be enough, or too many, HF stations. Would there be enough food? Were two porta-potties enough to manage this bunch (always strategically placed downwind, hopefully)? How about power and antennas? Not one of the Elmers knew how much of a success that first Field Day would be or how it would evolve.

Ingredients

Location:

The first and second year of the BARC Jr. Field Day was held at the home of three of the Juniors (yes, they are related). Their gracious family allowed BARC Jr. to barge in on their property and operate. The entire site was contained in less than an acre. In 1998, Field Day will be held in a new location. The Boulder Elks Club has allowed the BARC Juniors to invade their back lot. Once again, the location is about one acre. Next year, another new site is being considered.

Why? Variety! Anyone can set up a Field Day site on the same location year-after-year. The Elmers of the Juniors want to instill several concepts on the young harmonics: Amateur Radio is a public service,.It has been created to encourage technical advancement, international good-will, and, last but not least, fun. A new location does little for international good-will, but it certainly makes the kid's and Elmer's work a bit harder, technically. The changes in location also force the young hams to learn emergency preparedness skills that all hams should know.

Shelter:

The 'Juniors' used a 400 pound (this is not an exaggeration) scouting tent for the 1996 and 1997 Field Days. That tent worked very well and had more than ample room. Best of all, it was free! There were several drawbacks though. The tent was not particularly portable. In fact, a trailer and half-a-dozen strong people were required to fetch and set

(see "BARC Jr FD" cont. on Page 11)

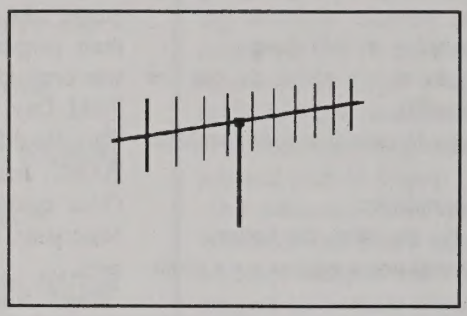
BARC Jr. Announcements

May 9 - Chuck, KI0AG is guest speaker. Topic is ***Solar Applications in Ham Radio.***
May 16 - No BARC Jr. Meeting - Dayton
May 23 - George, W1XE is guest speaker. Topic is ***Amateur Radio Space Communications*** including ***Moon Bounce.***
Jun 13 - BARC Jr. BOD meeting at 11AM
June/ July - BARC Jr. election of officers.

VIDEO VIEWS from CHAUTAUQUA
(Part III of a multi-part ATV series)
By Jim Andrews, WA0NHD-TV

Receiving Ham TV

Most local ham TV activity is on the 70cm ham band. To receive their TV pictures you can use your own home TV receiver if it is less than 10 years old and is 180 channel cable compatible. You will first need to set the Cable/Broadcast selector switch to "Cable". On some TV sets this is an actual switch on the rear panel or behind an access door on the front panel. On other even newer TV sets, it is a "software" switch that must be activated via a set-up menu using the remote control.



If you TV set is an older set that will only cover VHF channels (2-13) and UHF (14-83) broadcast or is an old 36 channel cable ready set, that will not tune up to cable channel 60, then you will not be able to receive our 70cm ham TV signals. There are tunable receiving down converters that you can buy that will convert the 70cm ham TV signals to a channel 3 signal that can be seen on older TV sets. However, I do not recommend them. For the cost of a down converter, you have paid half the price of a new TV set. 19" color, 180 channel cable ready TV receivers can be bought for only $150 or less from places like Target.

Next you need to disconnect your TV from the cable system. You will need to attach an antenna to your TV set. If you already have a 70cm ham, outside, vertical antenna, this will be the ideal situation. If you don't have one, then try using the "rabbit ears" antenna that came with your set. You will need to orient your antenna for vertical polarization. Commercial broadcast TV uses horizontal polarization. Local TV hams are using vertical polarization. We selected vertical polarization because it makes for more convenient portable and mobile TV operation.

Next you need to call one of the local, active TV hams. Ask him to turn on his TV transmitter and give you a test signal. Preferably he will also activate the Chautauqua Park TV repeater. Use the BARC 146.70 repeater to talk back and forth while you are looking for his picture. He will be transmitting on either cable channel 58 or 60. If he is going through the TV repeater, look for his picture on channel 57.

TV propagation is a bit tricky. At 70cm UHF frequencies, it is definitely "line-of-sight" considering the low powers we typically use of 1 to 10 watts. Depending upon where you live in Boulder County will determine whether you will be able to see a picture from the Chautauqua Park repeater. It does a good job of covering the eastern plains part of the county. Like the BARC 146.70 repeater, it does not work into the mountains to the west. It covers all of the city of Boulder except for the western part of Table Mesa. It covers well to the northeast into Gunbarrel, Niwot, Hygiene and western Longmont. It works out east to Erie and parts of Louisville and Lafayette. It can be seen in the high parts of northern Broomfield.

Did you get a TV picture? Yes! Great! No!, well don't give up. Give me a call then. I am willing to come to your home QTH and help you debug your TV setup. I will even bring along a TV transmitter and transmit TV mobile from your driveway. If you can't get my picture from your driveway, we will have some serious debugging to do!

Did you see a weak picture? OK, good you now have a fighting chance. Moving beyond rabbit ear antennas, there are 3 items that will help improve your TV reception. They are: (1) good antenna, (2) good, low loss coax cable and (3) a low noise pre-amplifier.

There are several good 70cm antennas. Diamond makes good gain, omnidirectional vertical base station antennas. If you want a beam antenna, stay away from those that are designed for narrow band, 432 MHz operation, such as Cush-Craft. Instead, I recommend you buy from KLM. They make good, wide-band Yagi beam antennas which will cover the entire 70cm band. Mount your antenna as high as possible. Don't forget to mount it for vertical polarization.

For your coax cable, use good quality, large diameter coax. Do not use RG-58 for long cable runs. The best solution is to use hard-line.

The front end noise figure of most TV receivers is not that great. They all can be improved by adding a good low noise preamp. Don't use a Radio Shack preamp! I asked Bill, K0RZ, what he recommended. He said he uses Advanced Receiver Research pre-amps for his 70cm moon bounce station. I have found that their GaAs FET model P432VDG is a great pre-amp. It is broadband and covers the whole 70cm ham band, has 16dB gain and a fantastic low noise figure of < 0.5dB.

Good Luck with your TV reception! I hope to be seeing you soon on ham TV!

73 de Jim, WA0NHD - TV

BCARES Board Meeting Minutes - April 13, 1998

Rich Ferguson, KA0DXM - District 11 EC opened the meeting with a round of introductions. There were 16 people in attendance, 4 visitors from other District ARES groups and 12 BCARES members.

Rich gave a talk about staffing, containing info on problems, concerns, planning and coordination. This subject followed his article as published in CQ VHF magazine, issue of Nov., 1997. This discussion was directed toward ARES EC's and ARES planning & staffing personnel and was about 45 minutes long followed by questions from the floor.

After the break, the BCARES board members went over the membership list in order to separate reserve and active member lists. These lists will include individual's training and levels of training plus allow us to build a database with other fields of information (DFing, HF capability, etc.,). Len Koppl, KD0RC will make up the new lists and distribute to the BCARES membership.

Bob Schneider, N0OUX and Jack Ciaccia, WM0G, gave the attendees a briefing about the call BCARES responded to for County - wide radio interference. It was decided that we plan a large area fox hunt this year in order to improve our skills and equipment for this kind of situation.

Pat Lambert, WD0FEX briefed us on the packet SET that was held on March 28th. 4 people from ARES Districts 10, 11 and 23 participated. Although the participation was low, they accomplished all that they had planned to do.

Submitted by:
Butch Wright, KA0TZX
BCARES Secretary
BARC/BCARES Liaison

1998 BARC Meetings, Programs and Activities

May 19 - ***SKYWARN*** - Guest speaker will be David Richindifer, WD0HNQ. What the members of SKYWARN do, how they do it, equipment they use and information on weather spotting in Colorado - plus information on upcoming SKYWARN classes. Meeting at NIST, Auditorium.

Jun 16 - ***"The Fine Art of Fox-Hunting".*** Tips, Techniques and Equipment used in T-Hunting. Learn how this activity is used for fun and for serious situations as well. Guest speaker will be Dave Sharpe, KI0HG. NIST, Rm. 1107

Jun 27, 28 - ***Field Day*** - Two separate sites for BARC and BARC Jr. - BARC Jr.'s site this year will be at the Elks Club grounds on North Broadway. BARC's site TBD.

Jul 21 - ***BARC Annual Picnic and Fox Hunt.*** Bring along anything you'd like to barbecue. Soft drinks provided by BARC. After the picnic, the *" Foxes "* will be let loose - Bring along your RDF gear and let's see who will reign this year as the *"Lord of the Foxes"* - Picnic Site TBD.

Aug 18 - ***"ATV Equipment, Antennas and Basic Theory"*** - Guest speaker will be Jim Andrews, WA0NHD. Jim will conclude his multi-part ATV articles featured in this newsletter with this ATV presentation and equipment demo. Meeting at NIST, Rm. 1107.

Sep 15 - ***"Time Coordination Around The World And How It Effects Radio Communications".*** Plus information on the atomic clock and the research going on here at NIST for an even more accurate clock. Guest speaker will be John Lowe from NIST. Meeting will be held at NIST, Rm. 1107.

Sep 27 - ***BARCfest and ARRL Colorado District Convention.*** The theme is *"Youth and Amateur Radio"*. A youth forum will be featured and the forum moderator will be Rosalie White, WA1STO head of the Education Activities Committee from ARRL HQ. Meet your Rocky Mountain ARRL representatives. BARCfest is held annually at the Boulder County Fairgrounds. For more info check the BARC website at URL:

http://www.thisistrue.com/barc.html

Oct 20 - ***QRP Home Brew Night*** - Bring along any Home Brewed QRP Ham Radio gear (including kits) for Show and Tell. Guest speaker tonight will be Rich, W0HEP , President of the Colorado QRP Club, W0CQC. Meeting at NIST, Rm. 1107.

Nov 17 - ***Code Proficiency Test.*** - The code proficiency test will be held at 6:30PM *prior* to the regular meeting. Bring along your water cooled pencil for this event! 5 -?? WPM. How fast can you copy ? Certificates awarded. Guest speaker will be Yardley Beers, W0JF with his presentation on ***"The Mathematics of Trap Antennas"***. Meeting at NIST, Rm 1107.

Dec 15 - ***"The Space Environment & it's Effect on Radio Communications"*** presented by Dick Grubb, W0QM, acting director of the Space Environment Center. NIST, Rm 1107.

TO ALL RADIO AMATEURS

The ARRL has learned that the second civilian frequency for the global positioning system (GPS) could wind up within Amateur Radio's secondary allocation at 1.2 GHz. A decision on whether the new, second frequency will be 1205 or 1250 MHz is expected to be made sometime in August. An allocation at 1250 MHz could mean the end of amateur radio in the band 1240 to 1260 MHz. The Amateur Radio 23-cm band runs from 1240 to 1300 MHz.

In February 1997, the Department of Transportation (DOT) and the Department of Defense (DOD) announced an agreement assuring civilian GPS users of a second frequency considered essential for critical civilian GPS uses.

According to a DOD news release, the White House Commission on Aviation Safety and Security, chaired by Vice President Al Gore, "called for the establishment of a second civil frequency as part of a broader program to maintain US leadership in aviation and satellite technology."

More information on the 1.2 GHz threat is available at the following URL:
http://www.defenselink.mil/news/Feb1997/b022797_bt095-97.html

HR AMSAT News service bulletin 109.05 from AMSAT HQ Silver Spring, MD, April 19, 1998

Letters to the Editor

Editor,

Thanks for running my story titled "Why I Became a Ham", in which I told about my 2,000-mile solo bike ride from Colorado to Massachusetts. A number of your readers have contacted me to get more information about the Bicycle Mobile Hams of America, the club that you mentioned in relation to me.

Here's a bit of info: Founded in 1989, the BMHA has 450 members in 46 states and six nations. The members range in age from 12 to 82. In the "most-miles-cycled-in-one-day" category, we range between six and 397---miles, that is! Members share information about bicycle-mobile gear, antennas, and local and long distance rides.

If your readers would like more info and a sample copy of the BMHA Newsletter, please tell them to send an SASE to: BMHA, Box 4009-BB, Boulder CO 80306-4009, or they can E-mail me their name, call, and street address at: hartleyal@aol.com - and the material will be snailmailed to them the same day.

Keep up the good work with BARC'S Bark---it's become a must-read for Boulder area hams.

Sincerely,

Hartley Alley, NA0A
(A BARC member since 1981)

("Notes" continued from page 2)

ARRL's intent is to help stop the criticism that the League has been subjected to for their lack of action on amateur frequency interference issues.

Coupled with this latest move is an announcement by the ARRL that they have inaugurated an arbitration service for hams. They are charging $50 per party for this service payable to the Leagues Legal Counsel. Potential cases could be situations involving interference or frequency use. Could they be forcing the mandatory bandplan declatory ruling through the FCC in order to set up a stream of revenue from this legal service? Your comments please.

73, de Jack, WM0G

Vanity License Cost May Go Down

The cost of getting a vanity callsign may be going down. The FCC is considering lowering the annual fee as a part of its 1998 fiscal year budget proposal.

"In a stunning reversal of previous policy, the FCC is now in the process of reducing the regulatory fee associated with the issuance of a vanity amateur station callsign.

At present, requests for a specific vanity callsign requires a payment of $50 to the FCC (for a ten year license term). In MD Docket 98-36 released last week, the FCC's Office of Managing Director said that it would be reducing the cost of an amateur vanity callsign from an annual charge of $5.00 to an annual charge of $1.29.

The cost of a ten year vanity callsign was raised top $50 only last year. The Notice of Proposed Rule Making in MD Docket 98-36 was released on March 25th. Basically it says that you will have to continue to pay $50 until the new fiscal year user fees go into place. Last year the new fees went into effect on September 15th and it is expected that the Fiscal Year 1998 fees will go into effect about the same date later in 1998.

from ARNS - April, 1998

ISS and Ham Radio

Do not look for very many SAREX contacts in the foreseeable future. This as the space shuttle is involved in construction of the International Space Station and unlikely to have SAREX aboard future construction missions or shuttle to Mir docking flights. The reason is the heavy astronaut workload involved on these missions and the need to swap antennas during Mir docking flights.

Late this year two shuttle missions are scheduled. Shuttle activity on behalf of the space station also is important because it lays the groundwork for a permanent Amateur Radio presence aboard the International Space Station when it is completed and occupied in a few years. The International Space Station construction begins late this year or early next year, a transportable ham radio station will go into space that will support voice and packet on 2 meters and 70 cm. Also meanwhile, Mir is active on both those bands with 70 cm carrying most of the traffic at the present.

Via SAREX

ARRL asks Congress for Spectrum Protection

The ARRL is once again asking the federal government to protect ham radio frequencies. At the leagues request HR 3572 has been introduced in congress to ensure the availability of spectrum to Amateur Radio operators into the next century, and beyond.

The bill is called the Amateur Radio Spectrum Protection Act of 1998. It would preserve existing Amateur Radio spectrum against reallocation or sharing with other services unless the FCC provides equivalent replacement spectrum elsewhere.

HR 3572 was introduced on March 27th by Representative Michael Bilirakis of Florida with the cosponsorship of Representative Ron Klink of Pennsylvania. Bilirakis is a Republican. Klink is a Democrat. This gives HR 3572 bipartisan sponsorship and a better chance of passage.

More information can be found on the Leagues website at: www.arrl.org

Via ARRL

Rockwell Donates Art Collins Papers to Iowa Library

The papers of the late Arthur A. Collins, W9CXX, the founder and president of Collins Radio Company, have been deposited at the University of Iowa Libraries.

Art Collins who later became W0CXX died in 1987. He was a pioneer in the development of highly reliable two way radio equipment for the amateur, military and commercial radio markets. To this day, hams consider it to be the Rolls Royce in station gear.

Arts' company, Collins Radio, was headquartered in Cedar Rapids, Iowa and it began producing amateur radio equipment in 1933. One of the early highlights of Art Collins career came when Admiral Richard E. Byrd was planning his first trip to Antarctica. Byrd asked Art Collins to design and build transmitters for the expedition that would enable him to make live broadcasts to the United States from the South Pole. Later, during World War II, Collins Radio supplied electronic equipment for airplanes and ships. These stories and much more are reportedly included in the papers now in the schools possession.

Currently the material is being cataloged and it is not on display. There is no scheduled date when the University will making it available for public view.

Art Collins papers fill thirty three large boxes with documents covering the years 1932 through the late 1970's. Materials in the collection include correspondence, subject files, photographs, notebooks, corporate annual reports, product literature, product drawings and other working papers.

from Harold Ort

Amateur Radio RF Safety Calculator

If you've looked at the new FCC rules and regulations and have wondered if you are, or would be, in compliance with the RF safety requirements that are asked for on the new FCC form 610, then you really should check out this URL and website. It is sponsored by the University of Texas. Just plug in the information and it will do the math for you ! The website address is:
www.cs.utexas.edu/users/kharker/rfsafety/

submitted by:
Jack, WM0G

Former Alpha/Power employees form new company

Two former Alpha/Power employees have started up their own ham radio servicing outfit.

Alpha/Power's former president and chief technical officer Dave Wilson, G3SZA/AA0RS, and former service manager Brad Focken, K0HM, have opened Frontier Engineering. "With the cost of equipment rising steadily and the amount of time to use it declining, it makes economic sense to repair or modify a rig in order to extend its working life," Wilson says. He promises outstanding service and value.

Contact Frontier Engineering at:
Box 837, Platteville, CO 80651
tel/fax: 970-785-2897
e-mail: frontier@lanminds.net.

from ARRL newsletter April, 1998

Future Hamfests Calendar

May 15, 16, 17 Dayton Hamvention

If you haven't made reservations for this event by the time you read this - then you are too late! This hamfest attracts more than 30,000 radio amateurs from around the world. You will not find any other event that attracts more people wearing pocket protectors than this one! If you are going, then be sure to mark your program and check out our ***BARC Jr.'s*** who will be participating in the Amateur Radio Youth Forum for their 6th consecutive year.

May 30 - Northern Colorado ARC Swapfest - Ft. Collins, CO

8AM to 3PM. Larimer County Fairgrounds 700 Railroad Ave. Talk-in on 145.115 (100Hz), 146.52. Admission $3. Children under 12 free. VE sessions, commercial exhibits, computer and radio goodies. Tables reserve from Jeanne Gage, N0YHY @ (970)351-7327. For more information, contact Michael Robinson, N7MR, 2236 Silver Trails Dr., Ft. Collins, CO 80526 or call him at: (970)282-1167

August 29 & 30 - MARC Campfest/Swapfest

The 17th Annual Mountain Amateur Radio Club Campfest/Swapfest will be held at the Colorado Lions Camp, 4 miles North of Woodland Park on Highway 67 North. Free admission. Talk-in on 146.82. $10 per space daily to camp and/or sell. Potluck Saturday evening at 5:00PM. Prizes and snack bar. Advance reservations requested. Contact Don, AA0NW at (719)687-3692 or mail reservations to: MARC, PO Box 1012, Woodland Park, CO 80866

September 27 - BARCfest *and* Colorado District ARRL Convention

BARC's 45th annual swapfest and the 1998 Colorado District ARRL Convention will be held Sunday, September 27th from 8AM to 2PM at the Boulder County Fairgrounds. Admission is $4 at the door. Table reservations are $10/each prepaid (includes one free admission) or $15/each at the door. For more information and reservations, call BARC at (303)380-6540 or EMail: N0NLS@aol.com or visit our website at:

http://www.thisistrue.com/barc.html

Public Law # 103-408

To recognize the achievements of radio amateurs, and to establish support for such amateurs as national policy. (Enrolled Bill (Sent to President))

--S.J.Res. 90--

One Hundred Third Congress of the United States of America

AT THE SECOND SESSION

Begun and held at the City of Washington on Tuesday, the twenty-fifth day of January, one thousand nine hundred and ninety-four.

Joint Resolution

To recognize the achievements of radio amateurs, and to establish support for such amateurs as national policy.

Whereas Congress has expressed its determination in section 1 of the Communications Act of 1934 (47 U.S.C. 151) to promote safety of life and property through the use of radio communication; Whereas Congress, in section 7 of the Communications Act of 1934 (47 U.S.C. 157), established a policy to encourage the provision of new technologies and services; Whereas Congress, in section 3 of the Communications Act of 1934, defined radio stations to include amateur stations operated by persons interested in radio technique without pecuniary interest; Whereas the Federal Communications Commission has created an effective regulatory framework through which the amateur radio service has been able to achieve the goals of the service; Whereas these regulations, set forth in part 97 of title 47 of the Code of Federal Regulations clarify and extend the purposes of the amateur radio service as a-- (1) voluntary noncommercial communication service, particularly with respect to providing emergency communications; (2) contributing service to the advancement of the telecommunications infrastructure; (3) service which encourages improvement of an individual's technical and operating skills; (4) service providing a national reservoir of trained operators, technicians and electronics experts; and (5) service enhancing international good will; Whereas Congress finds that members of the amateur radio service community has provided invaluable emergency communications services following such disasters as Hurricanes Hugo, Andrew, and Iniki, the Mt. St. Helens eruption, the Loma Prieta earthquake, tornadoes, floods, wild fires, and industrial accidents in great number and variety across the Nation; and Whereas Congress finds that the amateur radio service has made a contribution to our Nation's communications by its crafting, in 1961, of the first Earth satellite licensed by the Federal Communications Commission, by its proof-of-concept for search and rescue satellites, by its continued exploration of the low Earth orbit in particular pointing the way to commercial use thereof in the 1990's, by its pioneering of communications using reflections from meteor trails, a technique now used for certain government and commercial communications, and by its leading role in development of low-cost, practical data transmission by radio which increasingly is being put to extensive use in, for instance, the land mobile service: Now, therefore, be it Resolved by the Senate and House of Representatives of the United States of America in Congress assembled.

SECTION 1. FINDINGS AND DECLARATIONS OF CONGRESS.

Congress finds and declares that--

(1) radio amateurs are hereby commended for their contributions to technical progress in electronics, and for their emergency radio communications in times of disaster; (2) the Federal Communications Commission is urged to continue and enhance the development of the amateur radio service as a public benefit by adopting rules and regulations which encourage the use of new technologies within the amateur radio service; and (3) reasonable accommodation should be made for the effective operation of amateur radio from residences, private vehicles and public areas, and that regulation at all levels of government should facilitate and encourage amateur radio operation as a public benefit.

Speaker of the House of Representatives.

Vice President of the United States and

President of the Senate.

When the Radio Bug Bites.....

By Jack Ciaccia, WM0G

Gigi, the daughter of Jack, WM0G copying a rare DX station at 20 wpm for her dad so he can work a "new one".

Never did I realize while I was opening a neatly wrapped gift on Christmas morning of 1953 how this present would profoundly affect the rest of my life. After shedding the wrappings, I found a "Germanium Diode Radio kit that can be assembled in less than two hours - instructions included". Why would anybody get me a radio kit ? I already had a really nice Admiral AM/FM clock radio in my room. Oh well, I'd decided I would build it anyway just to see if I could do it.

After checking the instructions and identifying the parts I began assembling them step by step. Four hours later I had assembled the kit that could be built in two hours as had been stated by the manufacturer. I plugged the headphones into the clip jacks and began tuning the ferrite loopstick antenna. All of a sudden, it came to life! But, I was listening to a station I didn't recognize at all. It wasn't one of the local AM/FM stations I was used to listening to. As a matter of fact, it wasn't a "real" radio station at all. It was somebody saying " CQ DX, CQ DX...This is W1VDI calling CQ DX on 20 Meters..." What the heck was I listening to ? It was gibberish to me. He repetitiously made this weird announcement for some time. Now I was really curious because I couldn't hear the person who must have called him back. He began talking in more gibberish telling the other party that he was "5 and 9 with some QSB". He said his name and that "his QTH was Providence, RI". Well, I didn't know what a QTH was but I recognized my home town. I wrote down what I could understand and went and asked my uncle, who owned a TV repair shop, what this strange language could possibly be. He explained to me that what I had heard was a radio amateur, a "ham". After filling me in on the fact that this was a hobby and that it was licensed by the FCC, etc.. he gave me an old radio magazine that he had in his shop and told me to take it home and read it. I read the articles alright but I don't think I understood five words in that magazine. About this same time in my life I joined the Boy Scouts and started to receive Boy's Life magazine, which had from time to time, articles on ham radio. I decided to study for the Boy Scout radio merit badge which got me more involved as one of the requisites was learning the Morse code.

I still listened to this little radio occasionally and marveled at the fact that I was listening to the BBC or Radio Moscow or the Voice of America. I learned how to send a signal report to these radio broadcasters and get a verification of report back in the mail. It was really "neat" getting mail from foreign countries and what a great way to increase my stamp collection! I decided by now that I needed a better radio for I'd been bitten by the 'Radio Bug'. I knew there were more stations I just couldn't hear and a 'bigger' radio should be able to pull them in. I noticed in the garage of one of my dad's friends that he had a shortwave receiver. It was a Hallicrafter's "Skybuddy" S-19R. Boy! I had to have it.. it had lots of dials and knobs. I asked him how much he wanted for it and he told me he'd trade me for the AM/FM clock radio in my room. What a deal! I could hardly wait to get this 'bigger' radio home and to toss my random wire antenna out of my second floor bedroom window for better reception. Boy, had I gotten the better of this deal! That old AM/FM was only used to wake me up for school anyway and now, if I didn't get up for school in time, I'd be able to listen to my new shortwave receiver! Of course my parents had different ideas. I remember listening to the chimes of Big Ben before I went to sleep and when I'd wake up in the morning I'd listen for the mocking laugh of the Kookaburra bird, the ID of Radio Australia. I would carefully tune around on the ham bands and listen to the hams as they chatted across the globe. I decided that I really would like to become a ham. I studied for an entire summer during school vacation (between playing baseball and going to the beach, of course). I studied the Novice theory, the rules and the 5 wpm Morse code. Finally I was ready. My father arranged for me to test with one of his fishing buddies who happened to be a ham. I passed! What a feeling! I waited for what seemed to be an eternity -- about 6 weeks -- and I finally received my Novice ticket in August of 1957 with the callsign of KN1IVY. My parents loaned me $75 to buy a Heathkit DX-40 transmitter and I built a 40 meter dipole. Now I was on the air just like the other hams I had been listening to for so many months. I wish I had my original log book and could thank the patient and kind ham who tolerated my first CW QSO -- It was awful! I was shaking so much I could barely send two letters without a mistake. My mind went blank when I was receiving and it must have taken 45 minutes to complete a signal report, name and QTH. Today, I meander down to the Novice portion of the CW band and work someone else who is new to the hobby and in some way try to repay that patient ham.

From the time I was 11 years old until this day, amateur radio has, in some form, played a role in my life. I studied electrical engineering in school, became a navigator/ radar operator with a fighter squadron in the Air Force under the command of a Colonel who was the son-in-law of another ham, Senator Barry Goldwater, K7UGA who helped me get equipment to set up a MARS station at our base. Upon leaving the USAF, I went to work as an engineer for a company that built electronic countermeasures (ECM) equipment. They sent me back to Vietnam as their technical representative. Once, while on assignment, I happened to be in the officer's club at Clark Air Force Base in Manila, Philippine Islands when I noticed an entourage of "brass" walking with a very familiar sounding voice. It was Arthur Godfrey, K4LIB who stopped and

(see "Radio Bug" cont. on Page 9)

("Radio Bug" cont. from Page 8)

introduced himself to me as I was waiting for a dinner table. I told him that I knew he was a radio ham, that we had worked each other once before and that my call was K1IVY. He left his entourage to talk to me about his SSB radio gear aboard the Boeing 707 he was flying. He told me he was trying to set a new around the world speed record. He proceeded to invite me to have dinner with him and the other guests. What a treat! I hope the General and those Colonels didn't mind that we monopolized the conversation with talk about ham radio!

In my 35 year career in electronics I have always worked around other hams. Ham radio has been a key part of my professional and social life. The on the air acquaintances and life long friends that I have made due to this radio hobby have been both diverse and rewarding. Sharing experiences with people in far away places or on a remote atoll will give you a different perspective on life and the world. I've had many QSO's with the descendants of the mutineers of the HMS Bounty on Pitcairn Island and it has brought history to life for me. I 've heard some of the biggest events in the news first hand as they've happened such as, the sinking of the Andrea Doria in 1956. I could hear the calls from both ships involved, the S.S. Andrea Doria and the M.V. Stockholm, as well as from the Coast Guard ships trying to coordinate the rescue before she sank off of Nantucket Island. I also remember listening to the first satellite, Sputnik I, in 1957 as it circled the earth with it's "beep" on the 15 meter band. I recorded that signal on my wire recorder and brought it to school for a science project -- got an 'A' on that one!

Another positive by-product of this great hobby is geography. When I was in junior high school I could find, virtually, any place on the world map and could even stump the teacher with a few! It definitely also helped my learning of navigation in the Air Force.

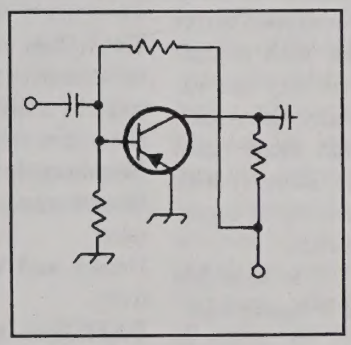
I always love to hear stories from the early pioneers of this hobby, about the equipment they've used and the "cat's whisker" set they may have built to catch their 'Radio Bug'. I entered the hobby much later and still got the same 'Radio Bug Bite' from my germanium diode radio kit. I bet if we gave the children of today a gift of a HF receiver board for their Multimedia PC's we would pass on this contagious 'Radio Bug'. It might be in a different form, but nevertheless, it's potentially still as infectious as ever and hopefully --- they'll never find a cure for it !

Ham Talk

By Bob Johnson, NQ5P

Please submit questions, comments, or puzzler solutions to Bob Johnson, NQ5P, preferably via e-mail (rjohnson@jceinc.com). Whoever first answers a puzzler will be recognized at the next club meeting.

The first person to solve the April Ham Talk puzzler was Blair Harness,KB0ROM. Blair is a BARC, Jr. Please congratulate Blair when you talk to him next. The problem was to use just 100 ohm resistors to create a 30 ohm resistor. There were a number of correct answers, the solution with the fewest number of resistors was three 100 ohm resistors in series (or 300 ohm), in parallel with three 100 ohm resistors in parallel (or 33.3 ohms). Thanks to all who participated this month, and keep trying!



David Casler's talk last club meeting got me thinking about the differences in starting out in Ham Radio from when I was a kid. In the early 1960s, a novice's first contact usually would be on 40 meters using CW. From there he would progress to 80 meters or 15 meters CW. As he advanced up in license grade, he might use AM on 2 meters or one of the other BANDS. SSB was catching on fast though, and it wouldn't be long before he purchased that first "Donald Duck" radio. HAMs plastered their walls with QSL cards, and if they were really good operators, they proudly displayed their Brass Pounder's certificate, their WAS (Worked all States) award, and maybe after many years and a sunspot cycle or two, a DXCC award.

Today a novice's first radio is a 2 meter FM Handy Talkie (HT). I don't know where he goes from there, as I haven't been around very many novices (yet!). I don't know what the parallel in awards are. I suppose eventually a new HAM could acquire some of the same awards.

But what award can a new novice work towards using a 2 meter HT? Here's my suggestion: a WAM award. What is a WAM award? Worked all Members! Last month each member was sent a roster. Work at least 100 members of the BARC and BARC Jrs on any band, and receive the WAM award. Here are the details: Record the date you work each member on your roster. Also record the band and mode he used for his first HAM contact. Send or hand a copy of the completed roster to me. I'll then present you with a WAM certificate at a future club meeting. Schedules are OK, and so are Nets. If you need to, call those HAMs by landline and get them on the air! Wouldn't it be great to hear 8 year old Dave, talk to Larry Amman, Steven Barnes, Richard Silberstein, Kenneth Smith, or Yardley Beers?

I don't have a puzzler this month. Send me your suggestions. However, I do have a question: What antenna should I buy or build to use with an amateur satellite and my dual band HT?

The Solar Guru Sez:

Solar sage Tad Cook, K7VVV, Seattle, Washington, reports:

Solar flux has been declining over the past few weeks, and now it is back on the rise. The predicted flux values for this Friday, Saturday and Sunday are 104, 106 and 108. Beyond that, flux values are expected to peak near 130 around May 8 and 9, then decline below 110 around May 15 and below 100 by May 17. Geomagnetic conditions have been active due to solar flares and coronal holes. The worst days recently were April 24-26, and we should see poor conditions again this Saturday, due to a flare on April 29 at 16:37 UTC. Active conditions should return next month around May 21-23 with an active coronal hole.

For the next few weeks, look for best worldwide propagation on 20 meters, with openings following local sunrise and continuing through the day. After dark, 20 should be excellent into the tropical regions well into the night.

Because of shorter dark hours, 40 should offer fewer openings. When solar flux is up, look for openings on 10 and 15 meters, particularly when WWV reports K indices of 2 or lower.

Sunspot numbers for April 23 through 29 were 38, 22, 50, 30, 19, 54, and 65, with a mean of 39.7. The 10.7-cm flux was 90.2, 90.6, 91.9, 90.7, 91.4, 98.4, and 100.5, with a mean of 93.4. The estimated planetary A indices were 14, 35, 22, 31, 14, 10, and 6, with a mean of 18.9.

from ARRL Newsletter, May 1, 1998

Possible mandatory adherence to bandplans

The ARRL has filed its long awaited request to the FCC to codify adherence to what have been till now, voluntary bandplans. The League has asked the Commission to equate observance of voluntary band plans with good amateur practice.

The League filed it's request for a declaratory ruling on April 3rd. In it, the national society asks for codification of several points of ham radio operation. First, it wants the FCC to affirm that any amateur radio operation that conflicts with established voluntary band plans, and which causes interference, or, adversely affects those operating in accordance with these band plans to be considered as being in direct violation of FCC rules. It also requests the Commission direct that hams should be familiar with current voluntary bandplans and that they are required to abide by them. Finally, the ARRL wants the FCC to state that those radio amateurs who don't operate in harmony with those band plans are not operating in accordance with good amateur practice.

The League has asked the FCC to issue this Declaratory Ruling as fast as it legally can.

ARRL to hams: Arbitrate - don't sue

The ARRL has inaugurated an arbitration service for hams, ham organizations, citizens and other groups having disputes relating to Amateur Radio. The ARRL Arbitration Service offers a substitute for litigation by providing binding arbitration to settle disputes. Arbitration will be arranged through the office of Chris Imlay, W3KD, the League's General Counsel. Arbitrator's will include ARRL volunteer counsel. Potential cases could involve interference situations or the use of a frequency.

Creation of the Arbitration Service is the first step toward a complete Alternative Dispute Resolution system, as envisioned by the ARRL Board at it's January meeting.

Cases may be instituted under the ARRL Arbitration Service by filing a signed Arbitration Agreement together with the $50 per party filing fee with the Leagues' General Counsel.

For complete details on this service, contact: ARRL General Counsel Christopher D. Imlay, 5101 Wisconsin Ave. North West, Ste. 307, Washington, DC 20016

from ARRL and other sources

("Minutes" cont from Page 1)

April 21st. Members Jack/WM0G, Rip/NV0M, Jim/N0VLE, Dave/KE0OG and Loretta/KB0VWW, Ellie/N0QCX, Rich/N0SH, Keith/WB0YPO, Glenn/W9FFU, Al/W0LMQ, Bernie/KF0QS, Greg/KC0ADT, Bob/NQ5P, Randy/K0RCC, Bruce/KD6NJT, Greg/WA0NDV, Tim/KC0CNQ and Linda, Marc/AB0GX, Darrell/KC0BXL and Liz and Isaac and Jacob, George/KB0SCX, Bob/K0XW, Russell, and Gary/KI0BM attended.

REPORTS:

Last Month's Minutes: approved as published in newsletter.

Repeater trustee: no changes.

Treasurer: we are in excellent shape.

Field Day: not present; Jack asked for volunteers to take over as chair due to the current chair's work schedule will not allow him to continue.

Membership: not present.

Interference committee: no interference!

Health and Welfare committee: no activity.

BARCfest: not present, but we have word that Ham Radio Outlet will attend as vendors again this year.

VE Team: on schedule to start monthly testing on May 11th at the LDS Church in Louisville.

MS Walkathon: enough people (13) have volunteered for this annual event. Thanks all!

OLD BUSINESS:

Tax-exempt status: Greg/WA0NDV is checking over the club's by-laws and is making progress.

NEW BUSINESS:

A BARC-supported class for new hams to get their no-code Tech license will start in May, to be held on Thursday evenings for no charge at the LDS Church in Louisville. The class will be held quarterly, taught by Dave/KE0OG. Contact Dave for details.

A motion was made to allow the BARCfest committee to spend up to $750 on 2-meter HTs to be used as door prizes. Unanimously approved.

Meeting adjourned to the program, "New Hams Night" by Dave/KE0OG.

Submitted by:
Randy Cassingham/K0RCC
BARC Secretary

Colorado Amateur Radio License Exam Information

Testing in Northern Colorado

Boulder - The Boulder VE Team holds exams the **2nd Monday of each month** at 7 PM at the LDS (Mormon) Church on 701 W. South Boulder Rd. in Louisville. Contact Ellie VanWinkle, N0QCX at (303) 494-5578 for details.

Ft. Collins - Exams are held the **second Saturday of odd months** at 9 AM at Colorado State University, Lory Student Center, Room 206, Ft. Collins, CO. Contact Steve Henry at (970) 226-2817.

Longmont - The Longmont Amateur Radio Club VE Team holds exams the **fourth Saturday of every month** at 10 AM at the Boulder County Fairgrounds, Administration Bldg., Longmont, CO. Contact Earle Cate, N0ISB at (303) 776-9158.

Greeley - The Greeley VE Team holds exams on the **second Saturday of even months** at the University of Northern Colorado, 11th Ave. and 21st St., Ross Hall, Room 36, Greeley, CO 80631. Contact Andy Loomis at (970) 339-9836

Denver Metro Testing

The South Metro VE Team holds test sessions the **first Saturday of every month** at the Castlewood Public Library, 6739 S. Uinta St., the SW corner of Arapahoe Rd. and Uinta, 1/2 mile West of I-25. Amateur Exams are held at 9 AM, Commercial Exams are held at 1 PM. For more info call David Avery, N0HEQ, at (303)795-5718

The Mile High VE Team holds exams the **second Saturday of every month** at 9 AM at St. Luke's Episcopal Church, 1270 Poplar St. Enter from the parking lot at 13th Ave. and Quebec St. For details call Glenn or Karen Schultz at (303) 366-0155.

The Denver Radio Club VE Team holds exams the **third Thursday of every month** at 7 PM at the Red Cross Bldg., 444 Sherman, Denver. For more info call Paul Veal, N0AH, at (303) 457-0665

The W5YI VE Team holds periodic testing in Aurora on the **last Sunday of every month** at 10 AM. For more info call Lee Tingle, K0LT, at (303) 364-6783

("BARC Jr. FD" cont. from Page 3)

up the tent. A new tent was purchased for the 1998 Field Day. This tent weighs in at 80 pounds soaking wet and the poles add another 50 or so pounds. A single Elmer is able to move the tent and two are all that is required to set it up. The night shift will be deprived of their view of the stars while operating, however.

The choice of a single operating tent was not happenstance. There are several things to consider: power distribution and people distribution. Perhaps with older folks the stations would be more ideal if some distance separated them for RF and AF reasons. With young hams, the major consideration is being able to see the entire crowd at one time. The Elmers have to take their supervisory roles seriously and having all in one place makes this easier. The local QRN is solved with headsets.

Power:

Solar power has been one of the landmarks of years gone by for the BARC Field Day operation. Several problems plagued the use of solar power. Many radios are not built to run on 12 volts DC for example. Those radios are built to run on automobile power with the engine running. Auto charging systems run anywhere from 13.5 to 14.1 volts while the engine is turning. The radios that are not tolerant of 12 volts simply quit when the 'skin charge' of the batteries was depleted and the voltage dropped to 12VDC and the sun had disappeared beyond clouds or the shroud of night.

Another problem with solar power is availability. The equipment is expensive and the BARC Jr.'s benefactor, as generous as he may be, simply could not afford to loan out many thousands of dollars worth of equipment. The size and capacity of the solar collector configuration was limited as a result. Over the first two years it was discovered that running 2A was not enough and the compliment has evolved to 3A plus a Novice station and a VHF/packet station. The available solar setup simply could not keep pace.

So... it's back to the basics! Yup, smelly old gas guzzling, fire spitting, noisier than a cat in a hot shower, generators were used. It was discovered over the past three years, that generators are the most reliable method of generating the power

Radios:

Whenever it looks as if the BARC Juniors will be short of radios, seemingly dozens fall out of the woodwork – donated by the most dedicated Elmers this author has ever met! Every year it appears as if the operation may be cut back from 3A to 1A or 2A due to equipment shortage. The request goes out for a bit of help and, wham! Half a dozen radios appear from nowhere!

All sorts of radios have been tried during the BARC Jr. Field Days, ranging from the super-simple to sophisticated DXer's rigs. The bottom line is always "return to the basics!" The simplest radios work out the best – no bells, no whistles, no left-handed, super-cooled framostats. Just a tuning knob, band switch, and mode switch. Simple. There are a wide variety of operators at every Field Day. Some are new to the hobby and some are people ready for the triple Quarter Century Club. The consensus is, regardless of the operators' experience, simple rigs make the contest easier and more fun. What a shock for people who delight in tuning up 6146 tank circuits! Isn't half of the fun turning the knobs?

Antennas:

There is a delicate balancing act, in the subject of antennas, between quick set up and functionality. It certainly is nice to have all those beam antennas on hand. The extra gain is also a plus since nobody has yet donated a linear to the 'Juniors'. On the other hand, 20 meters turns to a graveyard after gray line propagation dissipates and Radio Moscow taking over 40 meters, signals the beginning of the low-band hours. More than half of the contacts are made on 40 and 80 meters. The beams are little use then.

Is one beam enough? Maybe two? The debate is still open for discussion. Regardless of the correct number of beams, the bottom line is that they are expensive to put up and safety is a concern. A good base with a stable foundation is essential to safe setup and tear down. It costs in the neighborhood of $700 per tower to do the job properly. We're talking three sections of Rohn-25, a tilt-over base, and some thrust bearings. For 1998, the BARC Juniors will be limited to one tower as a result.

The rest of the antennas are simple, basic *DIPOLES.* Marconi would be proud! They work, they cost near nothing and they can be field modified if necessary.

Food:

An Army travels on its stomach, this is true for snails and BARC Juniors as well. The Juniors and Elmers have decided upon their favorite recipe for food over the past few years. Everything from barbecues to pot-lucks have been tried. The following are the ingredients for BARC Junior Field Day.

Saturday morning is a quick and dirty affair. Theres lots of work to be done and everyone is anxious to get on with it. Bagels are in order with standard condiments and coffee (for the Elmers).

Saturday lunch is the realm of the super-submarine sandwich. The local grocery store is more than happy to cut the sub into 3-inch pieces and individually wrap them. This makes it super easy for all to grab a hunk of a sandwich and get back to work. The sandwich also hangs around for many hours for when people get the munchies in the middle of the night.

Saturday night is a family affair. BARC Junior makes this a special event where all families are invited to attend and see what their RF infected spouses or siblings are up to. Spaghetti is the meal's anchor with families bringing a salad or desert to share.

Sunday is dedicated to the Breakfast Burrito. The gang, who has irradiated the ionosphere all night, like to have something to give them a kick to make it through the last few hours, and those who have been checking their eyelids for pinholes (RF caused, of course) are ready for something to kickstart them. Besides, the Juniors have threatened mutiny if Breakfast Burritos were not on the menu for Sunday morning.

Final Seasoning:

Many other things work toward the success of Field Day. Sprinkle in a couple of Elmers, without whom nothing would happen, the infamous 'stuff' list that includes things like duct tape and trash cans, and the porta-potties without which... uhhh – some things are better left to the imagination...

The bottom line is simply complex. Or is it complex-ly simple? Anyway... many factors come together to make the BARC Junior Field Day a success. Without any of them, it simply would not come off! The most important ingredients are, without a doubt, the dedicated Grandparents of BARC Junior: Ellie and Rip VanWinkle, the Elmers, and all of the great kids!

Submitted by:

Rich Weingarten, N0SH
(A BARC Jr. Elmer)

1998 Boulder Amateur Radio Club
Membership / Renewal Application

The **BARC** Membership year is from January 1 to December 31.
Please supply all the information requested below :

Date: _____ Call: _____
Name: _____
Other Family Member Name: _____ Call: _____
Address: _____
City & State: _____
Zip Code +4: _____
Phone: _____ E-Mail: _____

Membership type: _____ {R, C, A}
License Class: _____ {E,A,G,T+,T,N or blank}
Year Licensed: _____ (Year first license was granted)
ARRL Member: _____ (Y or N) License Expires: _____

***REMINDER:** BARC membership dues are payable at the first of the year. If you are a **BARC Jr.** whose family does **NOT** belong to **BARC** (not part of a family membership), then your yearly dues are also due January 1st. If you want to pay now, your dues will be paid through December, 1998.*

Membership Types:

R (Regular) -- **$ 18 / year**
Note: Family members are included in regular memberships in the same household.

C (Child) -- **$ 6 / year***
Child memberships are for children 17 years of age or younger whose parents are **not members of B.A.R.C.*

A (Associate) -- **$ 18 / year**

Make checks payable to B.A.R.C. and Mail to :
B.A.R.C. Membership
P.O. Box 17362
Boulder, CO 80308-0362

B.A.R.C.'s Bark

Boulder Amateur Radio Club
P.O. Box 17362
Boulder, CO 80308-0362

Randy Cassingham, K0RCC
P.O.Box 17326
Boulder CO 80308
98 ARRL- N

BARC meeting: *7:30 PM, May 19th*
SKYWARN - Guest speaker - David Richindifer, WD0HNQ. What they do & how they do it. Information on weather spotting in Colorado plus information on upcoming ***SKYWARN*** classes. Meeting at NIST, Auditorium. ***See page 5 of this issue for meeting details.***

A National Policy - Public Law # 103-408